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ABSTRACT

This guide promotes the use of natural supports to assist individuals with severe disabilities. The first two sections review the development of natural supports in the workplace, including changes in perspectives on the role of persons with disabilities, utilization issues, and the definition of natural supports. A seven-step process reflecting the development of natural supports is presented that calls for identification of need, establishing the life activity areas affected, identifying the extant networks of support, examining the natural support resources available within those networks, enabling a decision to be made as to whether existing resources will resolve the need, putting a support plan into place, and evaluating the outcomes of the support activities. The next section proposes a five-step supports and outcomes design that involves: (1) developing the person's whole life goals; (2) completing an ecological inventory of supports; (3) conducting a discrepancy analysis between the person's needed and available natural support networks and resources; (4) accessing needed supports; and (5) evaluating the outcomes from the natural support. The last two sections examine the implications of using natural supports and review how natural supports are used in the United States, Italy, Denmark, and Australia. (Contains 96 references.) (CR)

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Enhancing the Use of Natural Supports for People with Severe Disabilities

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Enhancing the Use of Natural Supports for People with Severe Disabilities

April, 1993

by

The Training and Research Institute for People with Disabilities (UAP)

in conjunction with
The Developmental Evaluation Center,
a University Affiliated Program

Children's Hospital, 300 Longwood Ave., Boston, MA. 02115

A report on the status of support networks and natural support functions/actives in the transition process for students with disabilities. Support for the development of this report was received in part from the Office of the Assistant Secretary for Planning and Evaluation, U. S. Department of Health and Human Services (grant # 90 ASPE 234 A)

Enhancing the Use of Natural Supports for People with Severe Disabilities

April, 1993

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ENHANCING THE USE OF NATURAL SUPPORTS FOR PEOPLE WITH SEVERE DISABILITIES

Natural Supports as Emergent Social Policy

Presently there is considerable conceptual and practical interest in the use of those resources and supports inherent in various community environments to provide maximum habilitation services to persons with disabilities and their families. This interest extends across disciplines and major life domains including education (Haring & Breen, 1989; McDonnell, Wilcox, & Hardman, 1991; Sailor, Anderson, Halvorsen, Doering, Filler & Goetz, 1989), families (Covert, 1992; Roberts, Wasik, Casto, & Ramey, 1991), employment (Callahan, 1992; Hagner, 1992; Hagner, Cotton, Goodall & Nisbet, 1992; Hughes, Rusch & Curl, 1990; Nisbet & Hagner, 1988; Sailor et al., 1989), community integration (Perske, 1988; Schalock & Kiernan, 1990), community living (Klein, 1992; Meador, Osborn, Owens, Smith & Taylor, 1991; Smith, 1990), and health/wellness (Cooley, 1992; Parette, Hourcade & Brimberry, 1990).

This emergent emphasis on natural supports is consistent with the following principles:

* Children with disabilities can achieve in the regular school environment when inclusive educational strategies are the focus of the educational community (McDonnell et. al., 1991; Sailor, 1989; 1991)
* Persons with severe disabilities can succeed in community employment and living arrangements given adequate environmental support (Edgerton, 1967; Janicki, Krauss & Seltzer, 1988; McGaughey, Kiernan, Schalock, Lynch & Morganstern, 1991; Rusch, 1990; Schalock, Harper & Genung, 1981; Smith, 1990; Wehman & Moon, 1988).
* Providing support that is in line with typical expectations concerning freedom and control over one's life is consistent with the current era of community membership (Bradley & Knoll, 1990: NASDSE, 1991), community integration and quality of life (Biklen & Knoll, 1987; Knoll, 1990; McKnight, 1987; O'Brien, 1987; Sailor, Gerry, & Wilson, 1991 a, b; Schalock, 1990; Turnbull & Brunk, 1990).

* Business and industry are currently re-evaluating how support and its own resources can support individual employees through Employee Assistance Programs, employee training programs and staff development activities (Akabas & Krauskopf, 1989; Googins, 1989; Kiernan & McGaughey, 1992).

Thus, although currently a popular topic, the concept of naturally occurring supports is by no means new. What is new, however, is the belief that the judicious use of natural supports can enhance the opportunities and functional capabilities of individuals with disabilities. This belief is exemplified in the current emphasis on supported employment, supported living, and more fully integrated support systems in education. The importance of accessing and using support networks which are inherent in the environment is that they hold the promise of providing a more efficient and on-going basis for enabling a person with disabilities to experience a higher quality of life through increased productivity, community integration, and job satisfaction. Additionally, by identifying networks and accessing those naturally occurring supports within those networks, habilitation services will move toward a more inclusive and integrated outcome for people with disabilities.

Natural supports offer many new challenges and opportunities for those providing services to persons with disabilities. The more important include the need for those in human services to identify support networks in community settings; to develop strategies to assist persons with disabilities in accessing those supports; and to develop approaches to both encourage the use and monitor the outcomes associated with natural supports. The purpose of this report is to assist others in maximizing these challenges and opportunities by reviewing the development of natural supports in the workplace; presenting a seven step process reflecting the development of natural supports; proposing a 5-step supports-outcomes design; examining the implications of using natural supports; and finally reviewing how natural supports are used in four different countries.

Throughout the report the reader will notice certain assumptions made by the authors. Chief among these include: (1) support networks are available in all major life domains (including community living, leisure/recreation, school, employment, and health/wellness); (2) the specific strategies for accessing natural supports may vary depending on external factors such as geographic location (e.g. urban vs. rural), cultural groupings and orientation of the individual, internal culture of an environment and the life domain; and (3) the use of naturally occurring supports will drive the delivery of services toward a more inclusive and integrated outcomes for people with disabilities.

By focusing this report on the role of natural supports in the workplace, the authors feel that a more complete presentation of the concept and design of natural supports for persons with disabilities will be possible. It is also the belief of the authors that the concept of natural supports is consistent regardless of the major life activity being considered.

Development of Natural Supports in the Work Environment

A. Trends and Changes in Perspectives:

The role of persons with disabilities in the United States is evolving from one of dependence to one of independence (Kiernan & Schalock, 1989; McKnight, 1987; Sailor, Gerry, & Wilson, 1991, a, b; Turnbull & Brunk, 1990). With the passage of the Americans with Disabilities Act (P.L. 101-336), employment opportunities, transportation access, public accommodation, and telecommunication will be enhanced for persons with disabilities. This legislation reaffirms the rights of persons with disabilities by prohibiting discrimination in jobs, requiring access to public entities such as restaurants, hotels and retail stores, and, in general, declaring that persons with disabilities have the same entitlements as all citizens.

Similarly, with the passage of P.L. 94-142 a wide variety of special education services, some of which were substantially separate from the regular education or mainstream settings, were developed (Lipsky & Gartner, 1989; Skrtic, 1990). More recently with the passage of P.L. 101-476 there has been a greater emphasis upon the reduction and/or elimination of the 'take out' or separate approach to special education with programs developing inclusionary curricula and educational opportunities for children with and without disabilities (Brown, Pumpian, Baumgart, Van Deventer, Ford, Nisbet, Schnider & Gruenwald, 1981; Halpern, 1985; Hasazi & Clarke, 1988; Sailor et al., 1989; Sailor, 1991). The concept of mainstreaming in education, as in the case of the Americans with Disabilities Act, stresses the strengths of students with disabilities, challenging and building on those strengths through full membership and participation in the regular classroom and other integrated school settings.

With the passage of the Rehabilitation Act Amendments of 1992, the focus of Vocational Rehabilitation (VR) services moved from the need for the individual to demonstrate an employment potential to one of presumption of eligibility for services. The continuing theme of consumer involvement, and comprehensive planning which was noted in IDEA was again repeated in the Rehabilitation Act Amendments. These Amendments included in the scope of VR services personal assistance services, transition services and supported employment services. Most importantly the Act calls for an increased effort to ensure that the desires of the individual are taken into account throughout the rehabilitation process.

These legislative initiatives (along with administrative and judicial supports) reflect the growing awareness that persons with disabilities should be included in the mainstream of communities. For full inclusion to be a reality, there must be an opportunity for the person with a disability to be an active participant in the planning and delivery of services, the choosing of the services to be provided, the acceptance of the responsibility for that selection, the opportunity to exercise risk, and the chance to learn through experience and doing. This acknowledgment of choice, responsibility, risk, and experience recognizes the rightful place for persons with disabilities aside persons without disabilities in the community (Kiernan & Stark, 1986; Schalock, 1990).

It is time that the human service delivery system undertake the development of strategies and designs that reflect these emerging values. The identification of the networks and natural supports that are inherent to those networks and available to all persons is the emerging challenge for the individual with a disability. Such naturally occurring supports can, when accessed, respond to the needs of persons with disabilities while neither reinforcing the concept of separate or special, nor interrupting or otherwise preventing spontaneous and natural interactions with typical people in the community and the workplace.

B. Issues in the Utilization of Natural Supports in Employment:

The trends and mandates noted above have substantially influenced the development of community based employment services for persons with disabilities (Kiernan & Stark, 1986; Rusch, 1986, 1989; Wehman & Moon, 1988). The realization that persons with severe disabilities can work was reaffirmed with the development of supported employment (Wehman & Moon, 1988: Rusch, 1986; Sailor et al., 1989). Persons who in the past were felt to be unemployable and would need day habilitation or day activities services as well as those who were felt to be able to work only in a highly structured and segregated environment such as a sheltered workshop are now increasingly fully integrated in the regular workplace with a variety of alternative supports (Kregel, Revell & West, 1990; McGaughey, et. al., 1991). The cornerstones of supported employment reflect the matching of the individual needs, abilities, and interests to the job duties, demands, and work environment expectations; training of the person with disabilities on site; provision of ongoing supports; and the fading of those supports as the individual becomes more proficient on the job.

Typically a job coach or employment training specialist plays a central role in the onsite training and support of the worker with a disability (Powell, Pancsofar, Steere, Butterworth,

Itzkowitz & Rainforth, 1991; Wehman & Moon, 1988). It is the role of the job coach to assure that the job is performed at an acceptable rate and within the company standards for quality. Once the job is mastered, the job coach reduces the amount of support provided to a level which assures the individual's continued employment. This intensive onsite training and maintenance of support differentiates supported employment from other employment training and placement approaches (McLoughlin, Garner & Callahan, 1987; Wehman & Moon, 1988).

Recently some concerns have been raised about the types of persons served through supported employment. Surprisingly, few persons with severe disabilities are accessing supported employment (McGaughey, et. al., 1991; Kregel, et. al., 1990). Additional concerns have been raised about the considerable reliance on the job coach and the potential for ignoring or excluding more naturally occurring supports in the work setting as well as the level of social integration being achieved by those in supported employment (Hughes, Rusch & Curl, 1990; Nisbet & Hagner, 1988).

To date, the primary approach to assisting persons with a disability, and particularly those for whom supported employment is appropriate, has been through the use of a job coach (Powell, et. al., 1991; Wehman & Moon, 1988). The job coach can also play a key role in identifying and accessing naturally occurring supports. However, in some instances the presence of the job coach may serve to inhibit accessing natural supports and developing relationships. Furthermore, the presence of a job coach in the workplace for extended periods can actually serve to distance the individual with disabilities from co-workers, create an aura of separate status with respect to the individual, and interfere with spontaneous, naturally occurring social interactions in the workplace (Nisbet & Hagner, 1988).

The potential for accessing employment through the use of integrated employment (supported, transitional, and competitive) strategies is not in question. The issue of assuring inclusion of the worker with a disability into the culture of the work place; the need to minimize the perceptions of separate, special, or different; the need to remove barriers to natural and spontaneous social interactions; and ultimately the need to be as cost-efficient as possible while providing quality services in the work setting, are the issues which need to be addressed. The obvious direction to take in responding to these concerns is the development of strategies to enhance access to those networks and associated support services which are available within the workplace for all workers.

C. Definition of Natural Supports in Employment

At a consensus planning meeting nineteen experts from the public and private sector considered the issue of natural supports, in an effort to develop a uniform definition of natural supports, identify some strategies for accessing natural supports, and consider the elements for documentation of outcomes of natural supports for persons with disabilities. This effort was sponsored by the Office of the Assistant Secretary for Planning and Evaluation, through a grant to the Training and Research Institute for People with Disabilities at Children's Hospital in Boston, Massachusetts (Kiernan & Schalock, 1989).

As a result of the meeting, agreement was reached regarding the definition of natural supports. The group defined natural supports as:

> **"those strategies and resources that promote the interest and cause of individuals with and without disabilities by enabling such persons to access information, resources, and relationships inherent in the integrated work place and community resulting in a valued and satisfied employee".**

A central element of this definition is the declaration of the purpose of natural supports to 'promote the interest and cause of individuals with and without disabilities'. This element of the definition addresses the concept of "separate" and clearly indicates that services, supports, and opportunities for persons with disabilities should be the same or similar to those available to persons who are not disabled. The concept of separateness is thus contrary to the developing principles of natural supports.

A second key aspect of this definition is the identification and location of the elements of natural supports. Natural supports include the accessing of 'information, resources, and relationships inherent in the integrated work place and the community'. This aspect of the definition acknowledges that natural supports include not just co-worker supports but resources, information, and social opportunities which may occur at or outside of the work setting. For example, the work place has become not only the setting where the employee can earn money but it is also a key focus for social contacts and recreation for many. Employers are now offering not just job support services such as staff development activities and employee assistance programs for the troubled worker, but also wellness and recreational supports (Kiernan & McGaughey, 1992; Googins, 1989). Thus, natural supports may be (1) resources or skills that are intrinsic to the individual and reflect the abilities and interests of that individual; (2) external supports as in the

case of co-worker, supervisor, or community supports to which the individual has access; and/or (3) modifications in or use of materials which can accommodate or adjust tasks or job-related activities such as adaptations, or changes in job tasks, sequence or assignments, such that the individual may be better able to meet the requirements of the employer.

The final element of the definition addresses the issue of outcome or results. Here again the focus is upon the needs and interests of the individual. As a result of accessing natural supports, the individual should be better suited to meet the requirements of the workplace (both production and social) and thus be viewed by others as a valued employee. The elements of natural supports, that is the information, resources, and relationships accessed, should lead to the maintenance or enhancement of the employee's level of satisfaction. The accessing of natural supports must result 'in a valued and satisfied employee'.

The definition of natural supports reflects the belief that these supports are diverse, individually focused, and common, thus available to all employees. The networks within which natural supports are found can be varied and reflect a wide variety of organizations, individuals, and environments. The outcome of natural supports is one of increased level of interaction, inclusion, and appreciation of the employee by both management and fellow employees, thereby generating an increased level of employee satisfaction.

D. A Process for Identifying Natural Supports.

The place to begin in developing of natural supports in a community or workplace setting is the identification of the environmental arrangements or changes which will be needed in a given context to enable an individual with disabilities to accomplish his or her defined role with success and dignity. The seven-step model identified in Figure 1 presents a logical sequence for guiding such an analysis. It calls for the creation of an approach that: (1) identifies the need; (2) establishes the life activity areas impacted; (3) identifies the extant networks of support; (4) examines the natural support resources available within those networks; (5) enables a decision to be made as to whether existing resources will resolve the need; (6) puts a support plan into place; and (7) evaluates the outcome of the support activities (see Figure 1).

In the accessing of natural supports, it is important for the individual with a disability to be actively involved in the identification of need (step 1). Additional other persons (friends, relatives or interested persons) may also be involved. Their potential involvements are indicated by the 'X' in Figure 1. The person with a disability is intimately involved with all seven steps in the process of utilizing natural supports. However, other individuals, including persons acting on behalf of

Figure 1
Process Steps in a Natural Supports Design

Process Steps	Primary Individuals Involved		
	Person	Resource Mgr./ Mediator	Other Person
1. Establish a person driven need. *(Need an ID badge)*	X		X
2. Identify life activity area(s) affected. *(Critical to work environment)*	X	X	
3. Identify networks or places in life activity area(s) which can respond to the need. *(Where can I get one? What place do I go to?)*	X	X	X
4. Identify natural support resources within the networks which can assist in resolving the need. *(Who or what can help me get the ID badge in that place?)*	X	X	X
5. Define personal choices and clarify expectations. *(Will that individual or appraoch help me get an ID badge?)*	X		
6. Develop access or action plan. *(Where is that person located and how do I get there?)*	X	X	X
7. Assess outcomes of actions to satisfy needs. *(Did I get the badge?)*	X	X	

the person with a disability, as in the case of a resource manager or advocate, might assist in a positive fashion in identification of the major life area influenced (step 2), clarification of the networks available within those areas (step 3), specification of the natural support resources within those networks (step 4), clarification of the role of the natural support (step 5), the development of the action plan (step 6), and assessment (with the individual) of the impact (step 7). Other people may assist the individual in identifying clearly a need (step 1) as well as the networks and natural resources that are available (steps 3, 4, and 6). The staff role or the advocate role is played out in steps two, three, four, six, and seven. The non-mediator or friend role is typically played out in steps one, three, four, and six. The friend role is often somebody who is involved or participating with the person in developing or implementing a life plan and identifying what the areas of interest, need, and action steps are.

Take the example of any individual who is employed in an industry which requires an identification badge (see Figure 1 italic). The need in this case is for the individual to obtain the identification badge (step 1). The life activity area affected is the job or employment (step 2). The networks or places which may be able to assist are the Security office, Human Resource Department or similar group in the company (step 3), the support resources inherent to the networks are typically individuals who can help identify or orient the individual to the ID process and complete the request for the identification badge for the employee (step 4). The expectation of the individual is that the employee identified will be able to assist (directly or indirectly) in securing the ID badge or securing and completing the form requesting the badge and filing it with the appropriate department or service (step 5). The access or action taken shows the individual finds where the department is and within the department who the key employee is and how that employee should be approached (step 6). Finally, the assessment of the outcome is a reflection of whether the ID badge was obtained or not (step 7).

The example, while simple, reflects a sequence involving the need for assistive functions that any new employee may encounter in order to get started in the workplace regardless of the presence or absence of a disability. This natural supports analysis stands in contrast to more traditional supported employment models, which might have a job coach steer the employee with disabilities through the process of obtaining the I.D. badge, or in some instances, procure the badge for the individual with little or no participation on his or her part.

The sequence of steps involved in accessing natural supports are based upon the need of the individual, the identification of networks within the major life activity which is being affected by that need, the identification of the natural support resources within those networks that can

assist the individual in resolving the need, and finally the development of the action plan in the resolution of the need. A key element in the concept of natural supports is understanding the relationship of the network and the natural support resources within those networks to the solving a specific need. The natural support resources can provide functions such as supervision, training, assistance, counseling, advocacy, socialization and job redesign. The process of identifying the network(s) which relate to the individual need recognizes that there are a wide variety of ways of responding to a need. Networks can reflect those resources, places, or groups of persons into which an individual may look for specific assistance.

The identification of a network which has support resources able to respond to an individual need will lead to the resolution of that need. The identification of a network without relevant support resources or those that have no relationship to the individual need will not lead to a positive outcome. In the former situation correctly identifying the secretary who can schedule with the Security Office and the support resources within that office will yield an identification badge for the new employee. Identifying a co-worker who does not know how to obtain an identification badge will not result in obtaining an identification badge. Thus, the effective use of natural support resources requires the correct identification of the network(s) and the accessing of the natural support resources to resolve a need.

Given the definition of natural supports, the following section offers a detailed discussion of a supports outcome design. This design begins with the concepts of whole life planning, progresses to the ecological aspects of natural supports, examines strategies for identifying ways of resolving needs using natural supports, and finally, offers suggestions on strategies to evaluate the utilization of natural supports.

Supports-Outcome Design

There are three key points to consider relative to the use of natural support networks and the natural support resources within those networks as presented in the supports-outcome design. First, the major purpose of such networks and resources is to enhance successful integration. Second, needs for support may either be of life-long duration or may fluctuate during different stages of one's life. And third, support resources should not be withdrawn unless the human service system continues to monitor the person's current and future level of needed support.

The five-step supports-outcome design is diagrammed in Figure 2 and described more fully below. As shown in Figure 2, the model's five steps include: (1) assisting in the development of whole-life goals of the person with disabilities; (2) developing an inventory of natural supports; (3) conducting a discrepancy analysis between the person's needed and available (natural) supports; (4) accessing needed (natural) supports; and (5) evaluating outcomes.

A. Whole-life planning

The core concept that should guide the use of natural supports is life-style planning defined as

> Bringing together the people whose cooperation is important to the person with a disability, and focusing on the quality of that person's life. The process results in a shared sense of direction and priority that guides the selection of whole life goals within integrated environments, activities, and performance objectives (O'Brien, 1987).

This first step is based on an expression of the person's interests and needs. Representative questions related to life planning are presented in Table 1. Answers to these questions can be used to develop the person's whole life goals related to employment, community living access and living arrangements, and social leisure activities. The questions are grouped around five key factors (O'Brien, 1987):

* **Community presence:** the sharing of the ordinary places that define community life.
* **Community participation:** the experience of being part of a growing network of family and friends.
* **Choice:** the experience of autonomy and decision making.
* **Respect and Competency:** the reality of having value in one's community.

Figure 2

Supports Outcome Design

Design Component	Anticipated Outcomes
Assisting in the development of a vision for the person's future	Development of employment, living and personal growth goals
Completion of an inventory of natural supports	Identification of: *support networks available in person's employment, living, leisure recreational and health/wellness areas *what natural support resources are available through these networks *how are these support resources accessed *which functions can these supports provide *the appropriateness of those support resources to a specific need
Conducting a discrepancy analysis	Determine discrepancies between the person's needed and available natural supports
Accessing supports	Networks identified Needed natural support resources identified Function of natural support resources identified Strategies implemented for accessing natural supports
Evaluating outcomes	Services evaluated against natural support standards Person-referenced outcomes evaluated in reference to enhanced independence, productivity, community integration and satisfaction

Table 1

Exemplary Questions From the Life Experience Profile

Community Presence

1. What community settings does the person use regularly?
2. What other community settings would it be in the person's interest to use, or use more independently?
3. What would it take to increase the number of community settings the person uses?

Community Participation

1. With whom does the person spend the most time?
2. Who are the other important people in the person's social network with whom time is spent?
3. Who are the person's friends?
4. What would it take to provide more natural support in the person's integrated employment, community living, and recreation-leisure environments?

Choice

1. What decisions are regularly made by the person?
2. What would it take to increase the number, variety, and importance of the decisions the person makes?
3. What are the person's strongest interest and preference?

Respect and Competence

1. What are the valued community roles the person occupies?
2. What characteristics about the person's appearance or actions could interfere with receiving value or respect in the community?
3. What would it take to enhance or improve these characteristics to receive value or respect in the community?
4. What skills has the person developed that help him/her to be perceived as competent?
5. What would it take to increase the person's competence in valued activities?

Satisfaction

1. What evidence exists that the person is satisfied with his/her home life, work life, community life, relationships?
2. What would it take to improve the person's satisfaction

Adapted from O'Brien (1987)

* **Satisfaction:** the fulfillment of a need or want and the contentment and happiness that accompanies that fulfillment.

There are a variety of approaches which are used in whole life planing. Common to these approaches is the focus upon the provision of a clear definition of those quality of life outcomes that are desired by the individual in work, social relationships, living, and leisure/recreation. The process of whole life planning as proposed in this report has been referred to by others as personal futures planning, life style planning, or outcome based planning (Beeman & Ducharme, 1988; Bolles, 1989; Mount & Zwernik, 1988; O'Brien, 1987; Steere, Wood, Pancsofar & Butterworth, 1990). These approaches share:

*an emphasis on the preferences, talents, and dreams of an individual rather than needs or limitations,

*participation by the person with a disability and significant others from their life in an ongoing group planning process,

*defining a vision of the lifestyles the individual would like to have and the goals needed to achieve that vision,

*identifying the supports and/or services an individual needs to reach his or her goals, and

*organizing support resources for the individual that are as local, informal, and generic or 'non-professional' as possible to implement the plan.

Major steps in a comprehensive planning process include:

*assisting the individual in identifying others who will be part of the planning process (e.g. family members, friends, neighbors, coworkers, classmates, etc.)

*facilitating the meeting in an informal setting and helping the group develop a comprehensive personal profile addressing preferences and personal choice,

*identifying specific outcomes in each of the life activity areas,

*identifying networks and support resources within those networks which can assist in the accomplishment of the stated goals, and,

*implementing strategies to realize desired outcomes.

B. Natural Supports Inventory

As currently envisioned, the process of accessing natural supports includes the following three activities: (1) identifying the networks and specific support resources that are available to reduce the mismatches identified in the support discrepancy analysis; (2) determining which natural support resources are most logical, appropriate, and acceptable to the person; and (3) accessing the needed supports.

In concert with the development and implementation of the whole life plan, a key task is the identification of the networks that are available in the person's living, community, work, and recreation environments; what natural support resources are available within those networks; and the level of support available. This process requires an evaluation of the presence of support networks and the specific resources as listed in Table 2. The concept is analogous to looking at one's own environment (be it living, working, or recreation-leisure), and asking, "what are all the supports available to me in that environment?" The intent of Table 2 is to help organize the ecological inventory by presenting, according to the major life areas (school/employment, community access, independent living, leisure/recreational activities, and health/physical issues), information about natural support networks and the resources within those networks. In this design (column 3) the categories of support available in the network reflect the development of individual skills, the assistance from others (co-workers, friends, family...), or the use of technologies (low and high technology, jobh adaptation, etc.).

Column 4 identifies the specific support resources which are available to the individual. In the case of the ID badge the support network may be other people with the specific support resource being Fred the Office Manager or Mary the co-worker at the next desk. Either of these resources knows how to obtain the ID badge. On the other hand, Frank, the next door neighbor who does not work at the company, is not a support resource in the network which can respond to the need for obtaining an ID badge. Column 5 provides a measure of the level of support which can be obtained from that resource. Again as in the case of the ID badge the worker at the next desk, Mary, is continuously available while the manager is intermittently available.

Table 2 may serve as a broad inventory where for each of the life domains the network, the resources and the level of support may be identified. This listing of all support networks and resources provides a master list which will be used in identifying natural supports which can respond to the specific needs identified in Table 3.

Table 2

Support Evaluation Matrix

(1) Life Activity Area by Category of Support	(2) Network(s) available to the person by Type (List)	(3) Categories of Support	(4) Specific Natural support resources within Network (List)	(5) Levels of support possible (Check)		
				Constant	Intermit-tent	Infrequent
School/ Employment		Individual/Self: Other Person: Technology:				
Community Access/IL		Individual/Self: Other Person: Technology:				
Rec/Leisure Activities		Individual/Self: Other Person: Technology:				
Health/ Physical		Individual/Self: Other Person: Technology:				

Table 3

Support Need Matrix

(1) Life Activity Area by Category of Support	(2) Person's Support Needs (List)	(3) Support network(s) available to the person by type (List)	(4) Categories of Support	(5) Specific support resources **available within network** (List)		(6) Specific support resources **to be developed** (List)	
				Internal	External	Internal	External
School/ Employment			Individual/Self: Other Person. Technology:				
Community Access/IL			Individual/Self: Other Person: Technology:				
Rec/Leisure Activities			Individual/Self: Other Person: Technology:				
Health/ Physical			Individual/Self: Other Person: Technology:				

C. Support Discrepancy Analysis

The primary intent of this third step in the support-outcomes design is to determine the discrepancy between needed and available supports. This part of the design is based on considerable work in the area of person-environmental analysis whose major principles include (Schalock, 1989; Schalock & Jensen, 1986):

*persons can be accurately described in terms of specific, measurable characteristics.

*environments are best described in terms of specific demand characteristics.

*the behavioral capabilities of persons and the demand requirements of environments can be objectively and reliably assessed.

*persons and environments can be assessed in common terms (that is, environments can be assessed according to which behavioral capabilities they require).

*the characteristics of persons and environments can be compared and discrepancies identified.

Figure 3 outlines the critical steps involved in the support-discrepancy analysis. The analysis begins with determining the person's support needs based on the discrepancy between the person's capabilities in regard to his/her job, community living, and recreation/leisure environments, and the performance demands of those environments. Specific strategies for completing such person-environmental analyses can be found in Calkins and Walker (1990), Hughes, et. al. (1990), and Schalock and Koehler (1988).

Table 3 offers a format for the development of an approach to listing the networks as well as the natural support resources which are available to the individual in a specific need area. This table requires that one list the networks (column 3) by type (column 4) of support (individual/self, other person, technology), and the support resources both internal and external (column 5) relevant to the specific need (column 2) in each life activity area (column 1). Finally, column 6 notes the support resources (both internal and external) which must be developed. The Support Needs Matrix is a way of organizing the networks and specific support resources available from the pool of networks and support resources noted in Table 2 as well as to highlight those supports which must be developed and whether they will be internal or external.

In the implementation of the whole life planning goals, there is a role for both internal and external support resources. The internal support resources are those which naturally exist and are the focus of this report. However, for some individuals at certain points in time, the need for external or paid supports to accomplish life goals is necessary. The Support Need Matrix

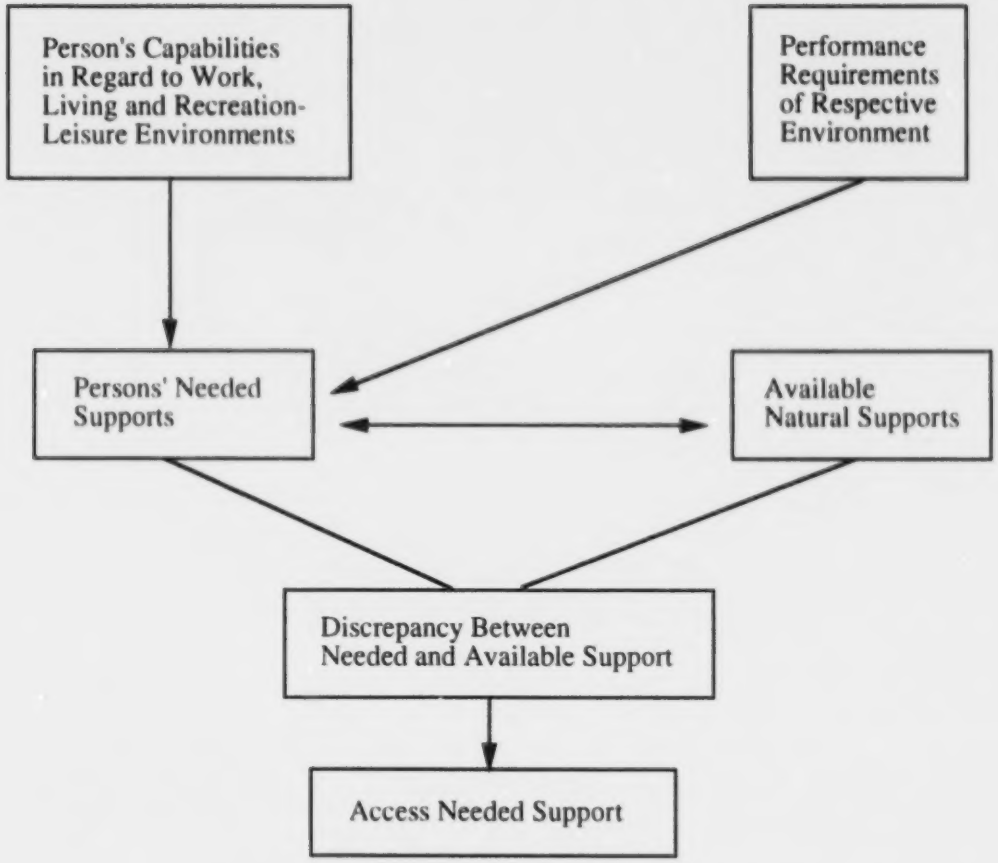
Person's Capabilities in Regard to Work, Living and Recreation-Leisure Environments
Performance Requirements of Respective Environment
Persons' Needed Supports
Available Natural Supports
Discrepancy Between Needed and Available Support
Access Needed Support

FIGURE 3. Support Discrepancy Analysis Model

provides a simple design for listing both those naturally occurring as well as paid supports addressing person specific needs in each of the major life areas.

From the Support Need Matrix, the specific needs of the individual in each of the life activity areas are identified. Both the natural and paid support resources are also identified according to the type: individual, other people, or technical. The results of this discrepancy analysis is the (1) listing of those natural support networks and the associated resources that are available through those networks by the key life activity areas and (2) the listing of those support needs the individual presents according to the major life areas for which specific support resources must be developed.

D. Procurement of Needed Supports.

Once the form presented in Table 3 (Support Need Matrix) has been competed, the next task is to arrange for the needed supports. The primary objective is to access networks and natural support resources occurring within the person's integrated living, work, community, and recreation-leisure environments before using external resources. In some instances this will include the identification of persons in the network who can provide the necessary support, assistance, advocacy, or other needed support functions.

The internal network can often provide this assistance. On other occasions it will be necessary to pay a support person such as a job coach to help in the training or supervision. In the case of the external support, the goal is to meet the need and then reduce the level of external support provided. Finally, changes in job tasks, use of technical aids, or the development of new methods may be used to respond to a need. These technical supports may be either externally or internally developed with the understanding that they will assist the individual to increase his or her skills such that the need will be resolved.

Accessing needed supports within one's integrated living, work, and recreation-leisure environments requires both new thinking and different staff utilization patterns. The new thinking focuses on the "naturalness" and potential effectiveness of natural supports; the new staff utilization patterns focus upon a support or resource manager/advocate who is competent in facilitating and/or coordinating the activities required by the five steps of the support discrepancy analysis model presented in Figure 2. These four previously described steps include assisting in the development of the person's whole-life goals, completing an inventory of supports, conducting a discrepancy analysis between the person's needed and available [natural] supports, and accessing needed support. The fifth and final step of the design requires an evaluation of the outcomes.

E. Evaluation of Outcomes

Habilitation services are currently being influenced by many significant factors including strong forces advocating for greater consumer empowerment and self-determination as well as greater cost containment and accountability (Schalock & Kiernan, 1990). These factors are increasingly directing a focus on the issue of what habilitation services actually achieve for consumers, and how those achievements can be identified and measured. In reference to natural supports, the current working assumptions are that their use will increase the person's level of integration and result in improved community access, community living, work and integration outcomes. The task of evaluation then is to determine whether these assumptions are valid.

The authors propose a two-step process in evaluating the outcomes of natural supports. The first step evaluates the program against a set of standards reflective of the concept of natural supports; the second step determines the effects of natural supports on person-referenced outcomes (see Table 4).

1. Natural support standards. Both the concept and use of natural supports are just emerging in the habilitation field. As a result, there is a need to operationalize the concept so that valid measurement and evaluation activities can occur. At a previously referenced consensus seminar sponsored by the Assistant Secretary for Planning and Evaluation, the following guidelines or standards were proposed for natural support programs:

* supports occur in typical, integrated environments,
* supports are provided primarily by persons normally working, living or recreating within that environment,
* support activities are individualized and person-referenced,
* supports enhance the respect and competence of the individual to others, and
* outcomes are evaluated against quality indicators and are person-referenced.

Although these proposed standards may change over time, they seem reasonable to use at this point to evaluate whether programs are actually using natural supports.

2. Person-referenced outcomes. As presented in Table 1, the goals of using natural supports are to improve community presence, community participation, choice, respect and competence, and satisfaction. These measurement focus areas should provide the general direction for evaluation efforts. Potential specific data sets within each of the measurement areas were presented in Table 4.

Evaluating natural supports in reference to the natural support standards and person-referenced outcome areas will help meet the increasing need for accountability. However, there is a clear need to move beyond simple outcome analysis, and undertake larger evaluation efforts that focus on both the impact and benefit-cost analyses of such programs (Schalock & Thornton, 1988).

Table 4

Standards and Person-Referenced Outcomes Against Which Natural Supports Should be Evaluated

Standards	Person Referenced Outcome	
	Measurement Focus	Exemplary Data Sets
Occurs in regular, integrated environments	Presence	Interaction with non-disabled persons, Initiation of interactions, Frequency of interactions, Purpose of interactions, Diversity of relationships, # of choices made, # of options
Support resources performed primarily by persons normally working, living, or recreating within that environment	Productivity/Integration	Salary (wage and benefits) Job history, Quality of work life, Co-worker relationships Career advancement Job diversity
Support resources are individualized and person-referenced	Choice	# of decisions/choices made, # of competencies/social skills acquired, nature of family/friend relationships, # of options provided, types of choices made, nature of choices
Supports enhance respect and competence of the individual by others	Value and Respect	# of activities which others feel are valued # of times individual asked to assume a valued role Frequency of interaction with others who are in valued roles Response of others to skills of individual
Outcomes are evaluated against quality indicators and person-referenced outcomes	Individual satisfaction	Physical and material well-being, Relations with other persons, Social, community, and civic activities, Personal development and fulfillment, Recreation & leisure activities

Implications of Using Natural Supports

The concept of natural supports, their design and use by persons with disabilities is just emerging in the habilitation field. Therefore, the five implications regarding the use of supports discussed in this section are based on our current understanding, and may change over time.

The first implication is that the natural support paradigm is very different from the service-based delivery system that characterizes most current habilitation programs. The five standards listed in Table 4 against which natural support programs should be evaluated characterize some of the differences. Other significant differences pertain to:

*assuming the presence and availability of support networks

*accessing the natural support resources within these networks

*focusing on support and support discrepancy analysis

*building the capacity of the work place and community-living environments to integrate persons with disabilities, and to assign value to these persons as co-workers and friends

The second implication relates to the emerging technology of support. In a recent review, Bellamy (1990) suggests that the following five features appear critical in a technology of support:

1. The technology should blend public and private sources of support in a coherent, manageable model.
2. Ongoing support should address assistance needs in all parts of a person's life.
3. Models for providing ongoing support should reflect realistic cost constraints.
4. Support should enhance opportunities for integration and participation.
5. Support should be linked to measures of individual benefits and outcomes.

A third implication of supports is the need to reach consensus on the different approaches to support, the impediments to support, and the maintenance of ongoing natural supports. This does not mean to imply that there needs to be models of support and designs of support networks that are replicated throughout the country; but rather that there is concurrence on the understanding of support networks and that the ultimate purpose of natural supports are toward the achievement

of person specific goals rather than numbers of persons served or types of networks and support options developed.

A fourth implication relates to the role that quality assurance or quality enhancement plays in support. Currently, accreditation and other standards focus primarily on services that are driven by the individual habilitation planning process. The assumption underlying these standards is that current habilitation programs should be offered through a structured, multi-disciplinary program planning process. There are currently no comparable standards for support networks because natural supports frequently do not require the level of structure or intensity of typical habilitation programs (Pearce, 1990). However, there is still a need for coordination of both the natural supports and agency or program supports available and an understanding of the various support networks.

The final implication of using supports relates to their effect on research. One apparent effect is to increase the call for research efforts in demonstrating whether specific types and levels of support enhance differentially personal and social outcomes for persons with a disability. Related research should attempt to answer the question "what kinds of supports or support programs employing what kind of persons serving what kinds of needs achieve what kinds of result?" (Roberts et al., 1991). Finally, a third effect on research will be to focus considerable efforts on evaluating the costs, benefits, and effectiveness of support-based versus facility-based services.

In summary, evaluation is critical to the future of the natural support agenda. Although attractive conceptually, there are a number of implications that need to be understood by policy makers as well as practitioner. In the final section, we examine the national agenda for a natural supports-based system for persons with disabilities, in the light of related developments in several Western European countries.

Support Models in Several Countries

Concerns about the movement of individuals with severe disabilities from school into adult life as well as the integration of persons with disabilities into work and community living has been expressed by many countries. In the previous sections, the authors have discussed the design and use of natural supports primarily in the United States. The following section looks at what some other countries are doing in this area.

It is not the intent of this section to advocate for the adoption of models, approaches, or designs that are employed in other countries, but rather look at a variety of approaches to meeting the challenges of providing a coordinated whole life planning process using the natural support resources, leading to person specific outcomes. Clearly there has to be some caution exercised in cross-country comparisons. What may be successful in one country, may not, because of environmental, economic, or cultural differences, be successful in another country. What this section hopes to present to the reader is a description of some of the key elements in successful programs and provide opportunities for the reader to consider the adoption of those strategies in their individual programs. A perspective from other countries can also facilitate the process of expansion of one's thinking, particularly in relationship to some of the more traditional views in service delivery for persons with severe disabilities.

A. Cross-cultural Trends

Many countries are currently experiencing the realization that persons with disabilities can become productive members of society. Past policies of segregation, isolation, and protective approaches to providing services for persons with disabilities are giving away to concepts of inclusion, integration, and heightened expectation. Past practices of viewing persons with disabilities from a categorical perspective are moving toward emphasis on the unique abilities, needs, and interest of the individual. General economic and technology changes throughout the world have given rise to new employment structures and qualification requirements. The increasing demand upon the productivity of the labor force, accompanied by a decrease in the number of manufacturing jobs which have traditionally been offered to persons with disabilities, might be expected to present problems for employment opportunities for persons with disabilities. However, changing demographic patterns leading to potential manpower shortages in several countries, expanded emphasis upon the service rather than the manufacturing sectors, and

advances in technology have counterbalanced the potentially negative impact of the high technology age in industry (Hernes, 1991; OECD, 1988).

From a public policy perspective, many countries are viewing large segregated programs as less desirable and as not maximizing opportunities for persons with disabilities to be included in community living. Several countries have taken aggressive steps that include persons with disabilities of all ages in community activities. The issues of inclusion and community involvement have had and will continue to have significant impact upon the perceptions and expectations of persons without disabilities regarding the capacities, involvement, and interest in persons with disabilities.

The Paris-based Office of Economic Cooperation and Development (OECD), which represents many European countries, indicated in a report examining the labor market a need for more coordinated approaches to policy formulation and labor market analysis among the European countries. Additionally, as a result of the Genoa Conference in 1992, the concept of coordinated programs and policy formulation for persons with disabilities between the United States and other European countries was advanced (OECD/CERI, 1992). The experiences of various countries in the policy areas of inclusion, income support systems, labor market development, technology advances, and person-driven systems of support are lending much to the development of innovative programs worldwide. The coordination and exchange of such information can only help advance the interdependence, productivity, and integration of persons with disabilities into all community environments.

Acknowledging the unique differences which exist culturally, economically, industrially, and politically among countries, there are promising approaches in addressing the needs of persons with disabilities in community environments. Though there are divergent approaches at the micro or applications level, there appears to be more convergence among countries at the macro or policy level. Table 5 (Hernes, 1991) summarizes a number of common threads in the service delivery system internationally for persons with disabilities. These elements include a focus on integrated employment, the evaluation of programs and the prediction of employment outcomes based upon individual needs and abilities rather than diagnostic categories, the realization that the rehabilitation process is an ongoing process, and the shift in emphasis from financial to other forms of support in the placement process (most particularly the inclusion of others as support resources for the individual with disabilities). Other common elements include an emphasis upon individual and flexible approaches, coordination and collaboration of resources, ongoing supports, innovative

Table 5

Cross-Cultural Successful Employment Program Practices

1. Focus on integrated employment
2. Outcomes relating to environmental variables (nature of training, levels of support, degree of integration, job accommodations, etc.) not client characteristics (age, IQ, etc.)
3. Habilitation process stressing obtaining and maintaining a job
4. Shift from financial to other forms of support (training, supervision, assistance)
5. Establishment of an individualized and flexible approach
6. Emphasis on co-ordination and collaboration
7. Personal follow-up and evaluation of outcomes
8. Focus on the psychosocial aspects of the workplace (introduction, training and follow-up)
9. Response to changes in job markets
10. Focus on the person's strengths and possibilities

Adapted from Hernes (1991).

approaches to labor market changes and demands, and the focus on the person's strengths and possibilities rather than deficits.

B. International Perspectives

There are significant commonalties among the philosophical perspectives which are driving the development of services of people with disabilities in many countries. The following presents some of the activities in four countries addressing the expanded view of persons with disabilities and their role in the community.

1. Italy. The province of Liguria in Northern Italy has chosen an inclusive approach to the education of children with moderate and severe disabilities during the pre-school and compulsory school (i.e., elementary and middle school) years. The hallmarks of this approach include:

* The classroom integration (in natural proportion) of virtually all children from pre-school through the upper age limit (i.e., 15) for compulsory school attendance.

* The reliance on the regular classroom teacher to provide basic instruction to all children of a given age, with general classroom support from special support teachers.

* A strong curriculum emphasis on the development of social and communication skills and competencies throughout the compulsory school period.

* The use of after-school teachers and special rehabilitation institutes to supplement the basic instruction program of children with moderate and severe disabilities (Gerry, 1989(a)).

The principle of normalization operates from the beginning of the public education program so that the social stigma caused by segregation never occurs. Not only do children with moderate and severe disabilities have continual exposure to social interaction with their non-disabled classmates, but the non-disabled classmates become familiar with and remain comfortable with the appearance and behavior of peers with moderate and severe disabilities. The development of social skills is obviously greatly accelerated not only by the curricula importance assigned to it, but also by the day-to-day demands of the integrated classroom environment.

For Italy, the concept of inclusion in the school years has had a significant influence upon the development of a parallel emphasis in the adult years. The focus on transition from school to adult life, through less broadly adhered to in the entire country, has been extensively developed in Genoa (OECD/CERI, 1992; Montobbio, 1991a, b). Here the government has taken an active role

in assuring that students move from school to adult life through the accessing of integrated employment. Previous reports by Gaylord-Ross (1987), Gerry (1989a) and Sailor (1989(a)) have documented and described the Genoa model; here the authors would like to reiterate some of the underlying principles of this model.

The principal goal of the Genoa Project (Montobbio, 1991(a)) is the successful integration of workers with disabilities in open employment, the "right place for the right person." The central philosophy underlying the project is that young persons with mental disabilities should be placed in "regular" (i.e., integrated) rather than "sheltered" (i.e., isolated) employment settings, wherever possible. This philosophy is based on four important premises: (1) work stimulates a strong motivation towards adult status; (2) a work setting, in contrast to the school and sheltered workshop, reflects age appropriate characteristics; (3) open employment is concerned with the exercise of a real status in the community and, thus (4) work in open employment is a fundamental step for persons with disabilities to acquire a socially accepted role rather than to maintain a dependent one. The Genoa project design focuses on (1) the use of an extensive work evaluation and training process to identify and develop "social skills" and general "work skills" (as distinguished from specific job skills) crucial to employment success; (2) the use of co-workers to provide initial "job training" and ongoing support to project participants; and (3) the creation of an ongoing "mediating" role for the project between the world of the adult with a disability and the family on the one hand, and the ordinary world of work on the other.

There are several elements of the Genoa approach that appear to respond most directly to the challenges that have been encountered by other countries. These elements include:

* Innovative elementary and middle school education strategies, focusing on total classroom integration and the development of social and communication skills;

* Flexible and individualized vocational training and innovative "trial work" strategies for supporting transition from school to gainful employment that stress the development of "work" skills rather than "job skills"; and

* An ongoing employment support system that relies heavily on co-workers and families to create a positive psycho-social environment.

The Genoa model offers several effective strategies to support full inclusion of adults with disabilities in the workplace. The success of the approach may in part be due to the principles established in the early educational years as well as cultural, economic, and/or social/political factors (Montobbio, 1991a, b). As was noted earlier the advantages of considering the experiences

of other countries is to capitalize on the common elements and lessons to be learned and to share strategies which have been proven successful in meeting the challenges of interdependence, productivity and integration of persons with disabilities in adult life.

2. Denmark. As described in a comprehensive report to OECD by Gerry (1989(b)), the Denmark Educational System is a unitary system including a primary and lower secondary mandatory educational program for children between ages of seven and sixteen (grades 1-9) with an optional tenth- grade program. There are three main principles which guide the Denmark Educational System, including normalization which guarantees equal participation for students with disabilities, integration which insures the placement of the student with a disability in regular schools whenever possible, and decentralization with the local municipal authorities having responsibility for the implementation of the educational programs (Gerry, 1989 (b); Hernes, 1991). Even given these principles noted in the previous paragraph, about 25 percent of the students with disabilities attending regular schools are in separate classes. Children with severe intellectual disabilities or multiple disabilities are educated in separate county run schools.

In the Denmark Educational System there is a significant emphasis placed upon the counseling and support systems. A variety of counseling and support services are available for the students in the mandatory educational programs from the seventh to the tenth grades. Such supports can be delivered by the guidance teacher, a youth advisor or a "Kurator". Career guidance includes the planning and coordination of the overall program of vocational orientation and training. The focus of the career guidance courses can range from development of work behaviors in grades 7 and 8 to specific skill development in a designated occupational area in the later years.

The Kurator, a teacher in the local school system, is responsible for coordinating and serving as a mediator for students with special needs throughout the Denmark Educational System. The Kurator becomes involved with the student from age thirteen. In later years the primary responsibility of the Kurator is to assist the student in the transition from school into adult life. The emphasis of the transition planning efforts, under the guidance of the Kurator, is to identify the strengths and interest of the student and to develop adult service opportunities which will maximize the abilities of the students while utilizing the natural occurring support networks that are available within the family and community settings.

The Kurator, on the average, has a case load of approximately 60 students, 30 of whom are enrolled in school and 30 are out of school in vocational or sheltered work programs. The primary

case load of students with disabilities assigned to the Kurator consists of students in special classes in the primary schools. Most of the students are described as those having specific learning problems. The Kurator's function is to give educational and vocational orientation to students with disabilities and arrange for occupational and job practices for those same students.

The support system available in Denmark reflects many of the same kinds of support structures which are available within the United States. The educational system in Denmark consists of both integrated and segregated learning environments. In some instances, as in the case of the special schools where students with severe disabilities between ages of 16 and 18 are educated, there is little opportunity for integration. Also in the case of the Green Schools, students with less severe disabilities (mental retardation and other developmental disabilities), though educated in substantially separate school programs during the day under the direction of the county government, are given greater opportunity for integration. Despite the prevalence of segregated programs for the school aged student, there is a growing emphasis upon full inclusion of students with all disabilities within the primary school system (folkeskole).

In the adult services system, Denmark utilizes segregated programs such as sheltered workshops and prevocational training centers as well as more targeted programs such as the Production Schools and Rehabilitation Centers. Many of the sheltered programs are run by county authorities. The stated goal of the sheltered programs is gainful employment but in practice, its primary function is to provide productive activity for persons with disabilities.

The increased emphasis upon guidance in the latter years of school as well as into adult life through the use of the Kurator model reflects an effort underway in Denmark to resolve the movement of students from school into segregated adult service or sheltered programs. The Kurator model is one that facilitates communication, increases emphasis upon individual goals and person reference objectives, and utilizes natural supports in those networks which are available to all persons within the local community. In many ways the Kurator serves as the case manager and support resource for the individual with a disability. Increasing emphasis upon the accessing of natural support networks and the natural support resources within those networks is a key function of the Kurator. Though a paid or external support, the function of the Kurator is to coordinate the whole life planning process for the student, to assist in the implementation of that plan utilizing natural supports, and to monitor the status of the person with a disability in the adult years. The Kurator role differs from the typical job coach role in the United States in that the function of the Kurator is one of facilitator and resource manager rather than trainer. Additionally, the Kurator

often addresses all of the life activity areas where the job coach will generally address the work aspects of the whole life plan.

3. Australia. Over the past five years there have been major changes legislatively and programmatically which have greatly enhanced the employment prospects and opportunities for students with disabilities in Australia. With the passage of the Disabilities Services Act in 1987 and the adoption of the principles and objectives related to this act, the Australian government, at the national level, has made a major investment in developing integrated community-based day and residential services for persons with disabilities. Much of the service delivery directed at obtaining and maintaining employment for persons with disabilities is the responsibility of the national government. In a 1985 national study, a number of specific findings were noted, including:

*There is broad community support for meeting the needs of people with disabilities through mainstream services and community-based programs.

*The achievement of positive outcomes for people with disabilities should be a fundamental criterion for service provision.

*Substantial improvements are required in the accountability of services for both service content and quality.

*Major changes are required in services for people with disabilities to reflect a focus on consumer outcomes.

*New, more flexible and responsive national legislation is necessary to implement the required changes.

As a result of this study, in 1987 the Australian government passed national legislation entitled "The Disability Services Act." The key features of this legislation are to:

*Provide a more flexible range of services for people with disabilities.

*Emphasize positive outcomes for people with disabilities including the increase in independence, participation in employment, and integration in the community.

*Promote a positive image for people with disabilities with the focus on quality life styles, and the abilities of people with disabilities.

*Require a more regular and systematic evaluation of funded services.

*Encourage and enable people with disabilities to have more say in the planning, implementation, and review of services.

A central component with the Disabilities Services Act was the improvement of employment opportunities for people with disabilities. The Australian Government, through this

legislation, declared that it will fund community-based organizations for both Supported Employment and Competitive Employment Training and Placement Services only. New employment services have been developed and will continue to be developed in direct response to the recommendations of the handicapped programs review which had identified the number of problems with sheltered workshops including the inappropriate work, extremely low wages, segregation from the community, poor working conditions, and lack of access to mainstream, integrated employment.

Competitive Employment Training and Placement Services have been established to assist people with disabilities in obtaining and maintaining jobs where wages are consistent with the current labor market. A particular focus of these services, as identified in the legislation, is the provision of services to assist with the transition from school to paid employment in the workforce. Supported Employment Services, on the other hand, is a service for those individuals who could be expected to require ongoing assistance if they are to remain in the paid work relationship. It is the intent of the supported employment services to provide intensive initial training with the phasing down of the supports as the individual develops the necessary production skills.

Existing employment services for persons with disabilities (sponsored by or funded through the Australian Government) must restructure their services in accordance with the employment services and philosophy outlined in the new legislation. The current service programs have been given a period of five years from the passage of the legislation to restructure their services and come into compliance with this legislation. Additional funds have been made available by the government to support the programs as they begin this conversion process.

The most unique feature of the Disabilities Services Act was the parallel adoption in June, 1987 of the statement of principles and objectives for the development and delivery of all Australian Government programs for people with the disabilities. Some of the key objectives include:

> "that services for people with disabilities should ensure that the conditions of everyday life of people with disabilities are the same as, or as close as possible to, norms and patterns which are valued in the community"
>
> "that programs and services should promote a competent and positive image of people with disabilities"
>
> "that programs and services should promote participation of people with disabilities in the life of the general community to a maximum physical and social integration"

> "that programs and services should provide opportunities for people with disabilities to reach goals and enjoy life-styles which are valued by the community at large and are appropriate to their chronological age"

As part of the major reform effort for persons with disabilities, an increased emphasis has been placed upon assisting persons with disabilities in moving from school into adult life. The Australian Government has adopted a transition model which includes not just the movement from school to employment but into adult life. The transition model adopted is a two pronged approach which included both school-based and community-based transition teams serving as liaisons, and curricula development mechanisms for the student moving from school into adult life. This model of transition reflects the involvement of key actors including the student with special needs, the family, the central adult service agencies, as well as school personnel and community-based persons interested in supporting the individual as the move from school into adult life progresses.

The efforts in expanding transition, coupled with the changes in the disability legislation at the government level have created a strong statement and direction for the transition from school to working life for young people with disabilities in Australia. The emphasis upon inclusion, integration, and whole life planning are consistent with those efforts which have been developed in other countries. The development of the major initiative at the federal level is a clear statement that persons with disabilities will be included in all aspects of the community.

In many ways the stage in Australia is set for the development of a system which has inclusion of persons with disabilities as a goal while the outcome of all service provision reflects individual person specific objectives leading to equal social status for these individuals. The principles put forth legislatively encourage service providers to use natural supports for all services delivered in an integrated community setting. As in the United States, the Australian government has clearly stated its philosophical base upon which it will revise and expand the provision of supports to persons with disabilities. The use of natural support networks and the support resources within those networks will be key to the success of the national effort.

4. United States. During the past several years, many major initiatives have been developed at the federal, state, and local levels emphasizing transition from school to work. Development of these initiatives has been supported by several critical factors:

* Clear evidence that students with severe disabilities can succeed in integrated employment given appropriate training and support (Bellamy, Rose, Wilson, & Clarke, 1982; Brolin, 1982; Hasazi & Clarke, 1988; Mithaug, Horiuchi, &

Fanning, 1985; Sailor et al., 1989; Wehman, Moon, Everson, Wood & Barcus 1988; Wehman & Moon, 1988).

* Documentation that with adequate support persons with disabilities can work (McGaughey et. al., 1991; Shafer, 1991).

* Acknowledgment of the need to provide persons with disabilities more diversified supports in the work place (Akabas & Krauskopf, 1989; Bluestone, 1989; Kiernan & McGaughey, 1992; Schalock, 1990; Turnbull & Brunk, 1990).

* Shrinking labor supply as industry moves from a manufacturing to a service base (Bluestone, 1988; Borgue, 1985; Kiernan & Schalock, 1988).

With education in the United States increasingly focusing on the outcome of employment, studies have shown that the movement of students from school to work has been extremely limited. Estimates suggest that from 35-40% of the students with disabilities do not enter employment upon graduation (Hasazi, Gordon & Roe, 1985; Mithaug et. al., 1985). Additionally, only two thirds of those employed worked full time (Hasazi et. al., 1985). Post graduation employment data show that this unemployment rate increases to 50-60% over time (U.S. Commission on Civil Rights, 1983). Unemployment rates for adults with disabilities have been estimated to be over 60% (Harris, 1985; Kiernan & Schalock, 1989).

Clearly, the lack of employment opportunities for individuals with disabilities has been a major concern in education and adult services. Efforts such as transition planning, inclusive education, and integrated employment have all focused upon the movement of the student with disabilities upon graduation into the typical life arenas available to all persons. The emphasis upon transition has also required a reexamination of the curricula offered to students with disabilities with a growing awareness that the transition effort must include not only movement from school to work but also to a full adult life including work, recreation and leisure activities, and community living (Halpern, 1985; Sailor et al., 1989; Wehman et. al., 1988; President's Commission on Employment of the Handicapped, 1988).

Education professionals, referred to as transition specialists, in some local school systems, knowledgeable in transition and life planning are central to the success in expanding the transition concept beyond school to work. As in the case of the Kurator in Denmark, the role of such a professional is one of delivering instructional activities within the classroom and community instructional settings, consulting to other professionals in special education, vocational education and related fields, providing a liaison with industry, and serving as a resource to students and parents regarding concerns about future social, community living and employment opportunities. Unlike the Kurator model the Transition Specialist does not continue to provide support once the

student is graduated. The responsibility at that point becomes the adult service system. It is at this point that student support frequently gets interrupted, and the "hand-off" of the plan and support activities is not made.

From the employment perspective the development of the supported employment initiative by the U. S. Departments of Education and Health and Human Services has shown that persons with disabilities who in the past were considered as not able to work can enter into and sustain employment when proper supports and ongoing assistance are provided (Bellamy et. al., 1982; McLoughlin et. al., 1987; Wehman & Moon, 1988). Employment clearly plays a key role in adult life for the person with a disability. The evolution of supported employment and the use of the job coach on site for both initial training and subsequent support has shown that inclusion into the integrated workplace can be realized. More recently, efforts to examine the incorporation of the worker with a disability into the culture of the workplace has shown that though tasks are being accomplished, full inclusion is more difficult to achieve. Reports and studies are now beginning to consider the role of the support system for the worker with a disability and to look more closely at the role of the natural supports that exist in the workplace (Hagner, 1992; Nisbet & Hagner, 1988). Several 'natural support approaches' are presented in Table 6.

The U.S. Department of Health and Human Services (Office of the Assistant Secretary for Planning and Evaluation) and the U. S. Department of Labor have recently funded six five year demonstration projects on the use of natural supports for persons with disabilities. These projects, located in California, Maryland, Massachusetts, Minnesota, New Hampshire, and Oregon, are exploring various ways in which natural support networks can and do play a role in assisting persons with disabilities in the work setting. These projects are the first concerted effort to examine the concept of natural supports and to explore how such supports can be used to enhance the integration and productivity of persons with severe disabilities.

The goal of the educational process for all students is the movement from school into a productive and contributing adult role in society. This same goal applies for the student with a disability. The realization that the transition process is a multiple year process (some might say a life time process), that inclusion is a goal for both education and adult life activities for the person with a disability, and the acknowledgment of the role of natural support resources in the community, has made the integration and employment process in the United States a central focus of policy formulation and program development at all governmental levels. Legislation such as the Americans with Disabilities Act (P.L. 100-336) clearly states that persons with disabilities are entitled to the same opportunities and must be able to participate in the same activities as persons

Table 6

Community Employment Support Options (a)

Option	Support/Person Role		Responsible to	Agency Role
	Internal	Ongoing		
Job Coach	Job coach training	Coach fades: worker is presumed independent	Agency	Direct: Training and follow-up
Mentor	Job coach trains: supervision is transferred to mentor	Mentor remains onsite providing support and supervision	Company	Indirect: Matching and support for mentor
Training Consultant	Job coach trains with the co-worker/ supervisors	Co-workers/supervisor provide support, supervision, and additional training	Company	Indirect: Consultation and stipend
Job sharing	Job coach identifies job sharer, then trains and assists	Job sharer remains on-site	Agency and company	Indirect: Matching: support for job sharer, stipend
Attendant	Attendant trains and assists (may need some assistance from job coach)	Attendant remains on-site at worker's discretion	Worker	Possibly initial training: afterward little or no intervention

a. Adapted from Nisbet and Hagner (1988)

without disabilities. The Rehabilitation Act Amendments of 1992 further support the concept that persons with severe disabilities should be involved actively in the planning process and that employment in an integrated setting should be the outcome for vocational services.

In the United States the age of inclusion, participation, and full citizenship for persons with disabilities has arrived. However, the implementation of these legislative mandates is still evolving. The accessing of those supports, which are in Society's mainstream and consistent with those supports available to persons without disabilities, will be the direction for education and rehabilitation services for persons with disabilities in the years to come.

Summary and Conclusion

In conclusion, this report has summarized the current status of the natural supports movement from a national and international perspective and some of the more important implications of using natural supports. The material presented outlines a sequence of steps in the process of accessing natural supports, a 5-step supports-outcome design that involves developing the person's whole life goals, completing an ecological inventory of supports, conducting a discrepancy analysis between the person's needed and available natural support networks and resources, accessing needed supports, and evaluating the outcomes from natural supports. Throughout the report it was stressed that the significance of support networks and the natural support resources within those networks to persons with disabilities is that their use will provide a more natural, efficient, and ongoing basis for enhancing a person's growth, development, and quality of life.

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